REMARKS

STATUS OF CLAIMS

In response to the Office Action dated November 1, 2006, claims 7 and 8 have been added. Claims 5-8 are now pending in this application. No new matter has been added.

REJECTION OF CLAIMS UNDER 35 U.S.C. § 102

Claims 5 and 6 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Suzuki et al. (U.S. 2002/0140652).

The rejections are respectfully traversed.

Anticipation, under 35 U.S.C. § 102, requires that each element of the claim in issue be found, either expressly described or under principles of inherency, in a single prior art reference. ***EMI Group N. Am., Inc., v. Cypress Semiconductor Corp.***, 268 F.3d 1342, 1350 (Fed. Cir. 2001); ***Minnesota Mining and Mfg. v. Johnson & Johnson***, 976 F.2d 1559 (Fed. Cir. 1992); ***Kalman v. Kimberly-Clark Corp.***, 713 F.2d 760, 218 USPQ 781 (Fed. Cir. 1983).

Independent claim 5 recites, *inter alia*:

> wherein the write-gray scale level determining section determines ***the write-gray scale level data ..., based on achievable gray scale level data ..., corresponding to input image data at the previous vertical display period, output from the achievable gray scale level determining section and the input image data at the current vertical display period...*** (Emphasis Added)

Suzuki et al discloses that the display drive data Fe of the current frame is set in accordance with the combination of input image data of the current frame nFi and post-drive status data of the previous frame (n-1)Fp (see paragraph [0042], lines 8-11; paragraphs [0044]-[0046], for example).

Therefore, the display drive data Fo, input image data of the current frame nFi and post-drive status data of the previous frame (n-1)Fp of Suzuki et al ***correspond to the write-gray scale level data, input image data at the current vertical display period, and achievable gray scale level data***, as recited in claim 5, respectively. The relationship between Suzuki et al and claim 5 is as follows:

Suzuki:	claim 5
Fo:	write-gray scale level data
nFi:	input image data
(n-1)Fp:	achievable gray scale level data

Furthermore, claim 5 additionally recites, *inter alia*:

> wherein the achievable gray scale level determining section, ***based on the detected device interior temperature***, determines **the achievable gray scale level data** for the input image data after the lapse of one vertical display period of the liquid crystal display panel. (Emphasis Added)

That is, in claim **5,** the detected device interior temperature is used to determine ***the achievable gray scale level data***.

Suzuki et al discloses "The display drive data generation unit 12 counts the vertical synchronous signal and, at each predetermined cycle, in accordance with the temperature information from the temperature sensor, downloads the most suitable conversion table from the ROM and presents it to the internal SRAM. By this means, ***the drive compensated drive data nFo is generated from the most suitable conversion table in consideration of the response characteristics of the liquid crystal material according to changes in the surrounding environment***

(see paragraph [0096]). That is, in Suzuki et al, the temperature information from the temperature sensor is used to determine ***the drive compensated drive data nFo*** (which corresponds to ***write-gray scale level data***), **NOT** post-drive status data of the previous frame (n-1)Fp (which corresponds to the ***achievable gray scale level data***). In Suzuki et al, the post-drive status data of the previous frame (n-1)Fp is determined by calculation of the equation shown in calculation unit 36 in Fig. 3.

Consequently, Suzuki et al neither discloses nor suggests "the achievable gray scale level determining section, ***based on the detected device interior temperature***, determines **the achievable gray scale level data** for the input image data after the lapse of one vertical display period of the liquid crystal display panel", as required by claim 5.

In accordance with the subject matter recited in claim 5, since the achievable gray scale level data (that represents the actually achievable gray scale brightness after a lapse of one vertical display period of the liquid crystal display panel, obtained from the input image data of the previous vertical display period) is determined in the light of temperature-dependence of the liquid crystal, it is possible to obtain correct previous data that conforms to the optical response characteristic of the actual liquid crystal display. Thus, in spite of the environment that the liquid crystal display panel is used, it is possible to prevent occurrence of afterimages and correctly display the half gray scales by always making up for the optical response characteristic of liquid crystal display panel for any motion picture, no matter what gray scale transitions it contains. Suzuki et al cannot obtain the above-mentioned advantages.

Thus, each element of independent claim 5 is **NOT** found in Suzuki et al, either expressly described or under principles of inherency. Therefore, independent claim 5, as well as dependent claim 6, are patentable over Suzuki et al. and their allowance is respectfully solicited.

NEW CLAIMS

New claims 7 and 8 have been added. New dependant claim 7 is supported by the present specification at, for example, page 15, lines 5-11. New independent claim 8 is also supported by the present specification at, for example, page 6, line 11 to page 7, line 18 and page 15, lines 5-11.

Claim 7

Dependant claim 7 recites:

> the achievable gray scale level determining section has a table memory that stores ***an achievable gray scale level parameter for a representative gray scale level transition pattern of every representative gray scale level distributed evenly or unevenly***, said achievable gray scale level parameter being obtained from an actual measurement of the optical response characteristic of the liquid crystal display panel, and [the achievable gray scale level determining section], ***based on*** the detected device interior temperature and ***the achievable gray scale level parameter, determines the achievable gray scale level data*** after the lapse of one vertical display period of the liquid crystal display panel, in accordance with the input image data. (Emphasis Added)

In Suzuki et al., the tables shown in Figs. 4 and 5 show drive correction value and differential value for gray scale level transition patterns of every representative gray scale level distributed evenly. However, these values shown in Figs. 4 and 5 are used to determine, **NOT** ***post-drive status data of the previous frame (n-I)Fp (corresponding to the achievable gray***

scale level data), but the drive compensated drive data nFo. Therefore, Suzuki et al neither discloses nor suggests the limitation of claim 7.

In accordance with the above-limitation of claim 7, the capacity of the table memory for the transition parameter can be reduced. Suzuki et al neither discloses nor suggests such advantage, as that of claim 7, is achievable.

Claim 8

Independent claim 8 recites, ***inter alia***:

> wherein the achievable gray scale level determining section has a table memory that stores a transition parameter for a representative gray scale level transition pattern of every representative gray scale level distributed evenly or unevenly, and [the achievable gray scale level determining section], based on the achievable gray scale level parameter, determines the achievable gray scale level data after the lapse of one vertical display period of the liquid crystal display panel, in accordance with the input image data.

Suzuki at al neither discloses nor suggests "the achievable gray scale level determining section", as recited in claim 8.

In view of the above, the allowance of new claims 7 and 8 is respectfully solicited also.

CONCLUSION

In view of the above amendment, applicant believes the pending application is in condition for allowance.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Edward J. Wise, Reg. No. 34,523

at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.14; particularly, extension of time fees.

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Respectfully submitted,

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